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CPW-C-GX-1063-77
Harrisburg, Pennsylvania 17120

February 2, 1973

Mr. Kenneth Noel
RD#1
Union Township
Hanover, Pennsylvania 17331

Re: Identification No. 100001
Keystone Sanitation Company Landfill
Union Township, Adams County

Dear Mr. Noel:

We have received your revised permit application and letter of May 21, 1972 which resulted from our previous review of March 16, 1972. In addition to the revised plans (Rev. of 4-4-72), we have your engineer's (Richard Conlin) letter of February 29, 1972. We wish to make the following comments:

1. We cannot agree with Mr. Conlin's assessment of the availability of the deeply weathered bedrock as a natural renovator of any leachate being generated at the site. While this material may not allow rapid movement of the ground water, it does not have any ability to remove suspended and dissolved solids from the wastes. Once the wastes move through the bedrock matrix and come into contact with the ground water, the ground water will be contaminated. Shallow soil depths limit the depth of the deposited refuse without going to collection and treatment. The bedrock is weathered along fractures and there are areas of higher permeability. However, these features are discontinuous and unpredictable. Our conclusion is that the ground water flows slowly into the trenches in places. This water, when coming in contact with the deposited refuse will generate leachate and carry the liquid waste products into the leachate collection/treatment system. Consequently, we will require the design and installation of a collection and treatment system before we will approve this site for a landfill. You should have your consultant contact the Bureau of Water Quality Management in Lewisburg for design criteria.

2. We have made our own on-site soils/geologic evaluation of the site. The watershed of the ravine along the (west side) of the barn may be suitable for use as a fill area, but only with a collection and treatment system included in the design. (Trenches) are not to exceed four feet in depth from the natural surface. An area type fill may be used.

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3. The newly dug trench on the south side of the site along the township road should be backfilled to sufficient depth to provide a 1:1 ratio of sub-base (above bedrock) to deposited refuse. This will mean that the existing trenches which are approximately 18 feet deep must be backfilled to within eight feet of the ground surface with suitable sub-base. Eight feet of suitable soil material must be placed along the side walls of the trench.
4. ~~Excavation of the trenches (into bedrock) is a violation of the Pennsylvania Solid Waste Management Act with initiation on October 1, 1972. Reverified backfilling must be in at least three of the test holes at a depth of eight feet. The design and operational plan must be altered to avoid placing refuse in direct contact with the bedrock. A 1:1 ratio of soil to solid waste must be maintained.~~
5. ~~Structure of the site is located on a ~~slope~~, basin-shaped topography which extends to the south. Trenches must be situated at the site so that their bottoms lie within this area. This will greatly enhance the ability to establish a reasonable collection system. Landfilling will be limited only to this area. Filling outside this area ~~is unauthorized~~ continuity. Please note item 3 of this letter.~~
6. A surface water diversion system ~~must be designed to divert water around deposition areas.~~ Please provide this information.
7. ~~Ground-water quality monitoring well locations must be plotted on the large scale map (1"-200'). One point must identify background water quality, and the other wells must be located downstream of each direction of ground-water flow from the site.~~
8. Your engineer's response to item 3 of our March 16, 1972 letter regarding a filling schedule is inadequate. The statement that, "filling will proceed in the Design Area in a manner which will minimize operational problems", is nebulous. ~~Are you now suggesting final cover, final continuity, water diversion systems and backfilling of cover material are all important items which must be considered when developing a site. A filling schedule is an important consideration in regard to the efficiency of the operation. Please clarify.~~ Please note item 3 of this letter when developing the filling schedule, which states that landfilling will be limited to the natural basin-shaped area that drains to the north and that landfilling outside of this area must be discontinued.

~~Within fifteen (15) days upon receipt of this letter, please furnish a comprehensive schedule for the submission of the above information. Failure to provide the required time schedule will result in the denial of the application for the initiation of disposal to obtain compliance with the Pennsylvania Solid Waste Management Act.~~

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